Table of Contents: Volume 7

Number 1

Schedule Efficiency in a Robotic Production Cell ..... *Irina Ioachim and François Soumis* 5

A Genetic Algorithm Approach to Optimization of Asynchronous Automatic Assembly Systems ..... *Mark A. Wellman and Douglas D. Gemmill* 27

Performance Management of Manufacturing System Networks ..... *Suk Lee and Asok Ray* 47

Decision Learning about Production Control as Machines Break Down in a Flexible Manufacturing System ..... *Kuo-Shong Wang, Hung-Wei Hsia, and Zheng-Dao Zhuang* 73

Number 2

Monitoring and Classification of Dimensional Faults for Automotive Body Assembly ..... *Chinmo Roan and S. Jack Hu* 103

A Model for the Minimum Cost Configuration Problem in Flexible Manufacturing Systems ..... *Ulrich A.W. Tetzlaff* 127

Intelligent Scheduling of FMSs with Inductive Learning Capability Using Neural Networks ..... *Li-Chih Wang, Hui-Min Chen, and Chih-Ming Liu* 147

Inventory Issues in Incremental FMS Implementation ..... *Mehdi Kaighobadi* 177

Number 3

Scheduling Algorithms for a Two-Machine Flexible Manufacturing System ..... *G. Andreatta, L. Deserti, and L.N. Giraldo* 207

A Heuristic Algorithm for the Loading Problem in Flexible Manufacturing Systems ..... *Heinrich Kuhn* 229

A Case Study in the Design of Flexible Assembly Systems ..... *Hubert K. Rampersad* 255

Modular Synthesis of Petri Nets for Modeling Automated Manufacturing Systems ..... *Mu Der Jeng* 287

Number 4

Analysis of Flexible Manufacturing Systems with Distinct Repeated Visits: DrQ ..... *Jeongseob Kim, Paul J. Schweitzer, and Abraham Seidmann* 319

XPN-FMS: A Cad Tool for FMS Modeling, Analysis, Animation, and Simulation Using Petri Nets and X Window ..... *Daniel Y. Chao and David T. Wang* 339

A Case Study in FMS Production Planning and Dispatching ..... *Peiling Wu* 361

Design of Grasping Methodologies for Rotational Assembly Components ..... *Nourredine Boubekri and Gopal Ramanujam* 373